## PATENT ABSTRACTS OF JAPAN

(11) Publication number: 2002175053 A(43) Date of publication of application: 21.06.2002

(51) Int. Cl G09G 3/36

G02F 1/133, G02F 1/1368, G09F 9/30, H01L 29/786

(21) Application number: 2000372355 (71) Applicant: SONY CORP

(22) Date of filing: **07.12.2000** (72) Inventor: **NAKAJIMA YOSHIHARU** 

MAEKAWA TOSHIICHI

## (54) ACTIVE MATRIX DISPLAY AND MOBILE TERMINAL WHICH USES THE SAME

## (57) Abstract:

PROBLEM TO BE SOLVED: To provide an active matrix display in which a narrower frame can be formed in a polysilicon TFT structure integrated with drive circuits, and to provide a mobile terminal which uses the above device as a display part.

SOLUTION: In the polysilicon TFT-active matrix type liquid crystal display device integrated with drive circuits, at least one of circuits relating to signals with small amplitudes or circuits relating to the power supply voltage, or a part of the circuits relating to the signals with small amplitudes such as a sampling clutch circuit 132, or a part of the circuits relating to the power supply voltage, such as a circuit 19 generating the voltage on a counter electrode is formed by using TFTs having a dual gate structure. Other circuits are formed by using TFTs, having a top gate structure or a bottom gate structure.

## COPYRIGHT: (C)2002,JPO

